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### REMARKS

Claims 1-28 are pending in this application. By this Amendment, claims 1, 20, and 21 are amended. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

Applicants gratefully acknowledge the Office Action's indication of allowable subject matter in claims 7, 8, 14, 15, 27, and 28. However, for the reasons set forth below, Applicants respectfully assert that all of the claims are directed to allowable subject matter and that the application is in condition for allowance.

The Office Action rejects, under 35 U.S.C. § 102, claims 1-6, 9-13, and 16-26 over Khullar et al. (U.S. Patent No. 6,400,928). The Office Action also rejects, under 35 U.S.C. § 103, claims 1-6, 9, 11-13, 16, and 18-26 over Khullar et al. These rejections are respectfully traversed.

Applicants assert that Khullar et al. does not disclose or suggest generating a decision statistic based on the received signal the decision statistic generated using an embedded interference-canceling algorithm, as recited in independent claim 1 and similarly recited in independent claims 20 and 21.

Applicants further assert that Khullar et al. does not disclose or suggest constructing a first decision statistic based on a first hypothesized modulation type including interference suppression based on the received signal, as recited in independent claim 9.

Regarding the rejection under 35 U.S.C. § 102, "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference" (MPEP §2131, citing *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)).

Also, regarding the rejection under 35 U.S.C. § 103, To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the reference or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references, when combined, must teach or suggest all of the claim limitations. The teaching or suggestion to make the

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claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure (MPEP 2142). The prior art must suggest the desirability of the claimed invention (MPEP 2143.01).

Khullar et al. discloses a method and system for blind detection of modulation (col. 1, lines 1-9). A radio front end section 64 receives bursts. A first de-rotation block 68(1) de-rotates a training sequence according to the rotation used for GMSK, while another de-rotation block 68(n) de-rotates the training sequence according to the rotation used for 8-PSK. In addition, other de-rotation blocks 68 can be included if other modulation schemes are used. A first synchronization/channel estimation block 70(1) correlates the de-rotated training sequence from the first de-rotation block 68(1) to the known training sequence to calculate a GMSK correlation quality measure and attempts to synchronize the receiving station 60 with the received burst 16, and another synchronization/channel estimation block 70(n) correlates the de-rotated training sequence from the other de-rotation block 68(n) to the known training sequence to calculate an 8-PSK correlation quality measure and attempts to synchronize the receiving station 60 with the received burst 16. These correlation quality measures are then used by a modulation detection unit 72 to determine which modulation scheme was most likely used for the burst 16. Generally, the correlation quality measure with the highest value will indicate that the modulation scheme that corresponds to that correlation quality measure was used for the transmission. Accordingly, the modulation detection unit 72 selects the corresponding modulation scheme for the burst 16 (col. 8, lines 24-67).

Khullar et al. does not disclose or suggest generating a decision statistic based on the received signal the decision statistic generated using an embedded interference-canceling algorithm, as recited in independent claim 1 and similarly recited in independent claims 20 and 21 and such is not asserted by the Office Action.

Additionally, Khullar et al. does not disclose or suggest constructing a first decision statistic based on a first hypothesized modulation type including interference suppression based on the received signal, as recited in independent claim 9, and such is not asserted by the Office Action.

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Therefore, Applicants respectfully submit that independent claims 1, 9, 20, and 21 define patentable subject matter. The remaining claims depend from the independent claims and therefore also define patentable subject matter. Accordingly, Applicants respectfully request the withdrawal of the rejections under 35 U.S.C. § 102 and 35 U.S.C. § 103.

### CONCLUSION

Based on the foregoing amendments and remarks, Applicants respectfully submit this application is in condition for allowance. Favorable consideration and prompt allowance of claims 1-28 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephonic number listed below.

The Commissioner is hereby authorized to deduct any fees arising as a result of this Amendment or any other communication from or to credit any overpayments to Deposit Account No. 50-2117.

Respectfully submitted,



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